

Figure 1A

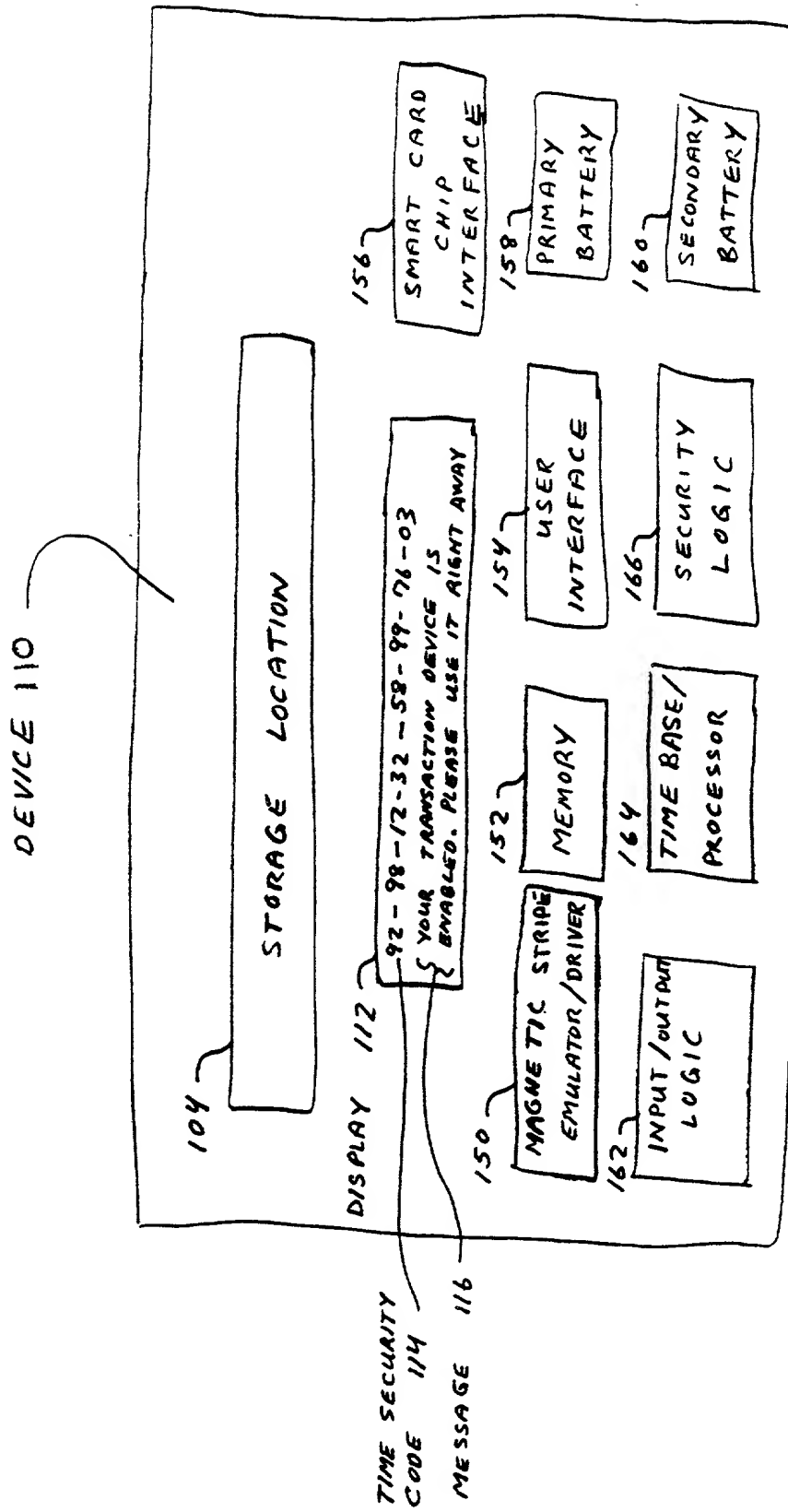


Figure 1B

FIG. 1B is a block diagram of a device 100 for processing a personal transaction card 102.

PERSONAL TRANSACTION CARD 102

STORAGE LOCATION/MAGNETIC STRIPE 104a

DEVICE 110

DISPLAY 112

TIME SECURITY CODE 114

MESSAGE 116a

INSERTION

120

122

124

126

CRYPTO -
GRAPHIC
PROCESSOR

CARD
READER

FP
READER

CARD
WRITER

92-98-12-32-58-99-76-03
YOUR CARD HAS BEEN
ENABLED. PLEASE USE IT
(RIGHT AWAY.)

Signature

106

100

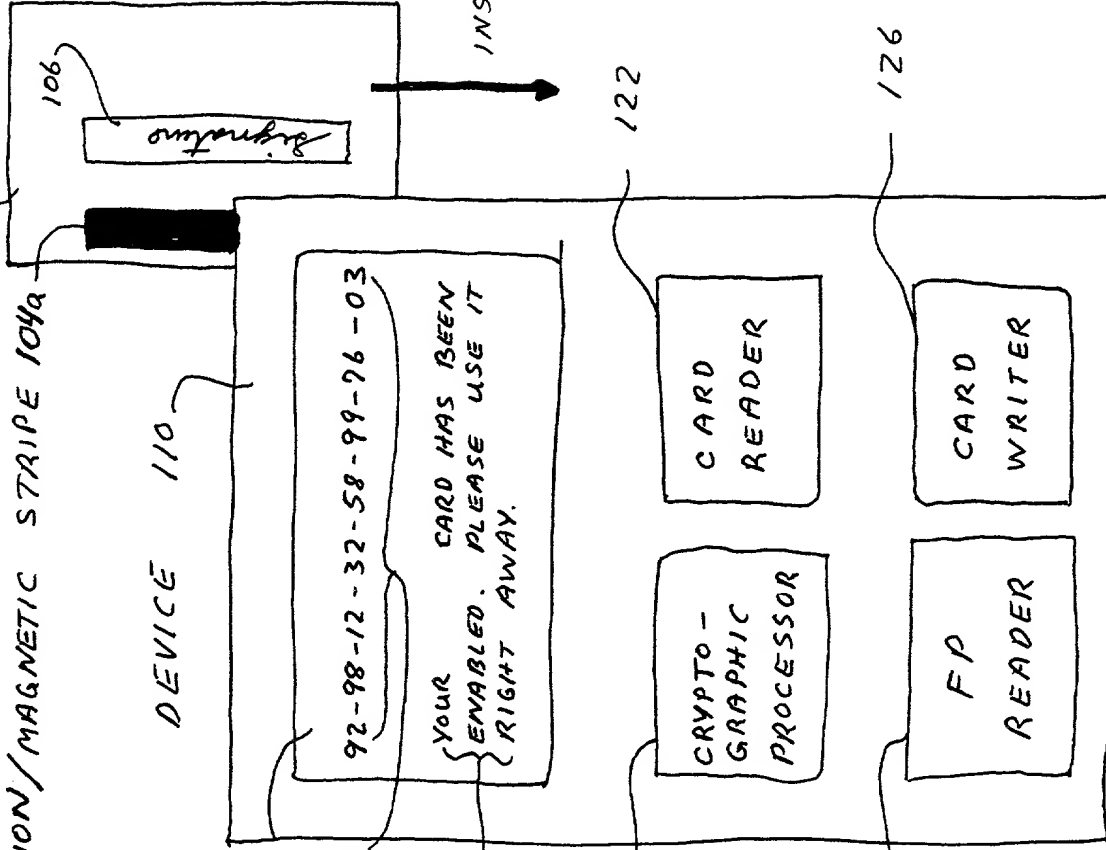


FIGURE 2

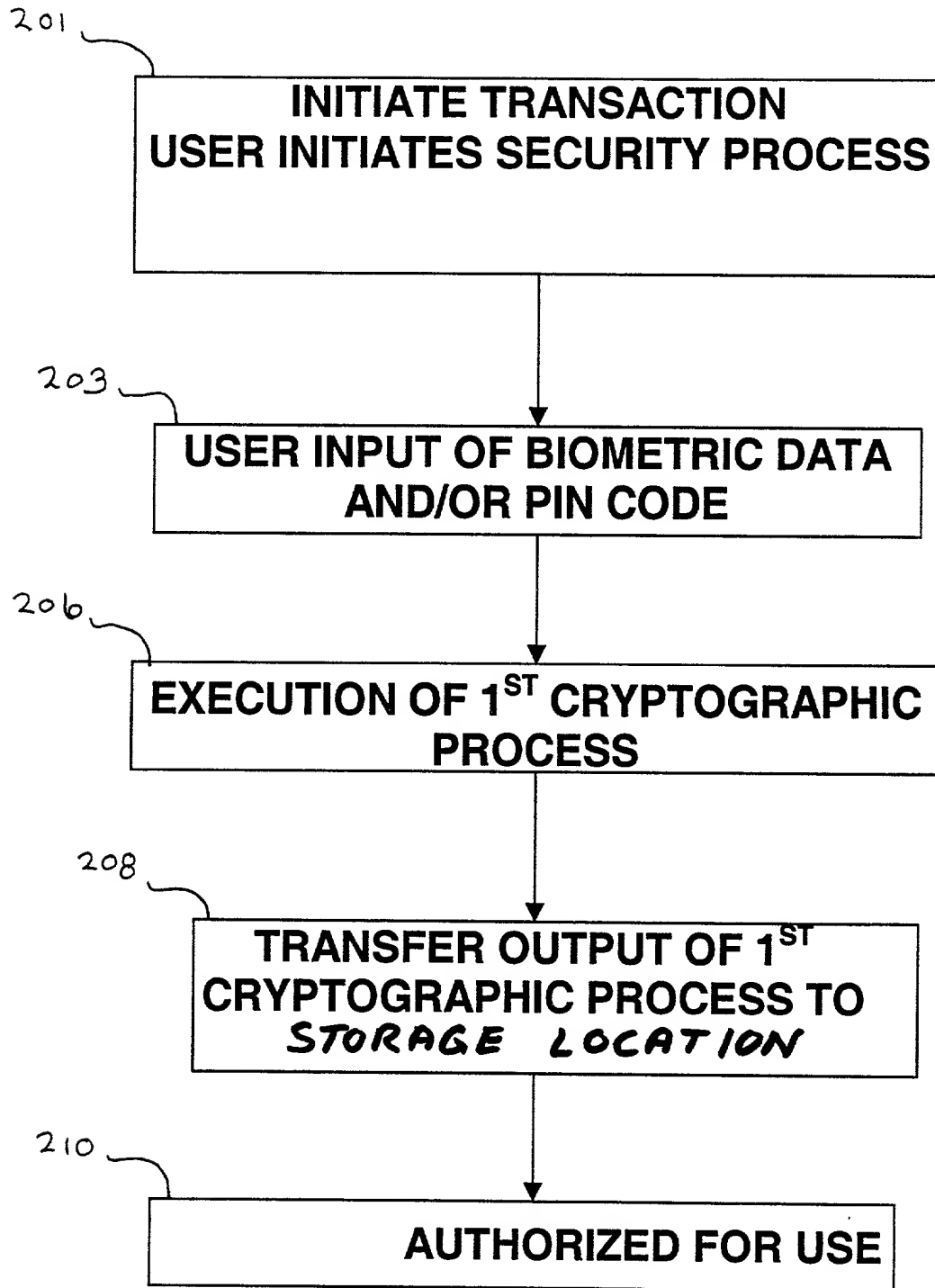


Figure 3

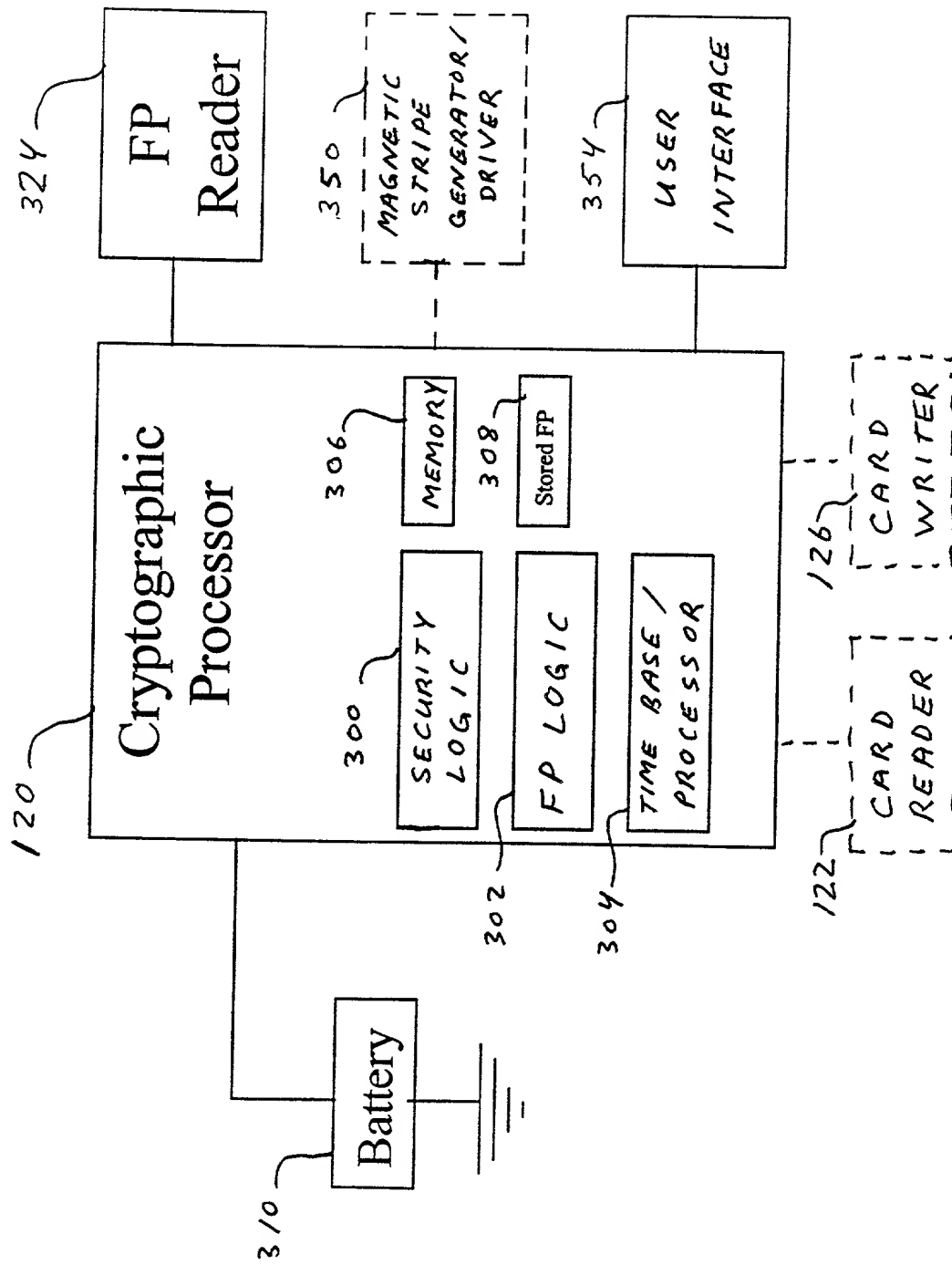


Figure 4A

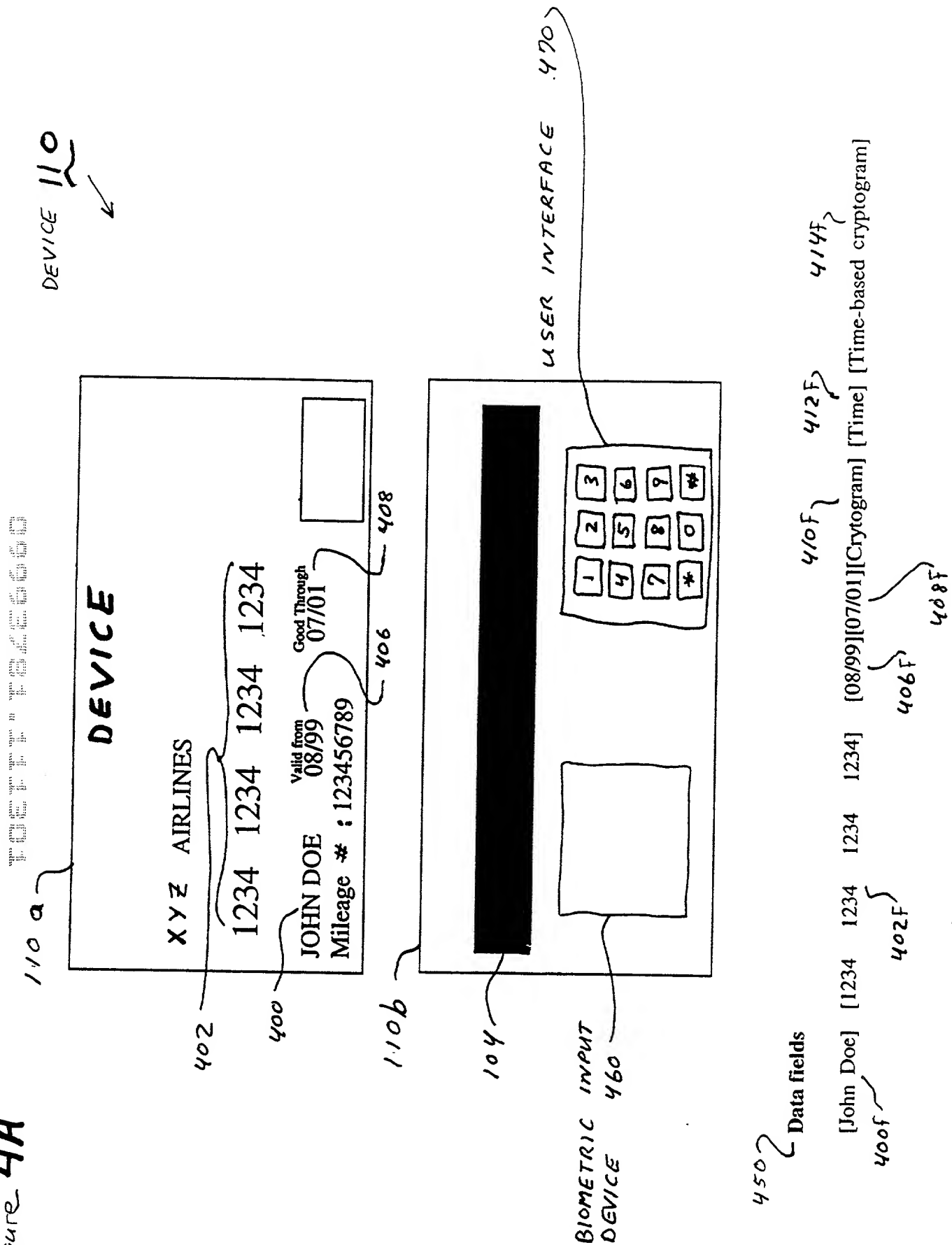
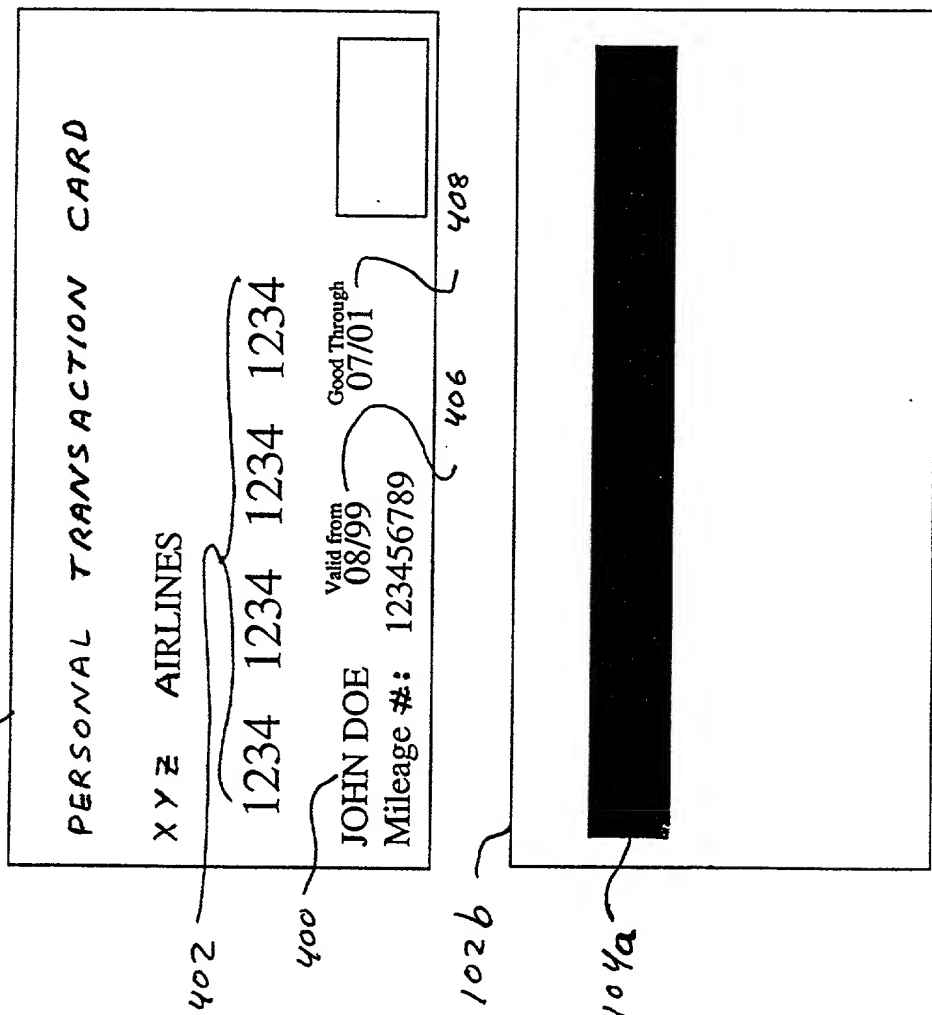


Figure 4B

102a PERSONAL TRANSACTION CARD 102



450 Data fields

400f [John Doe] [1234 1234 1234 1234] 406f [08/99][07/01][Cryptogram] [Time] 408f [Time-based cryptogram]

410f 412f 414f

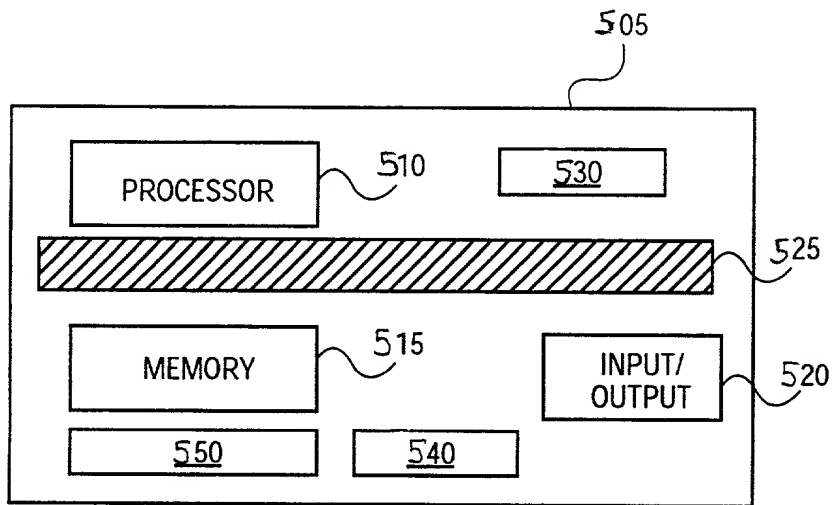


FIG. 5

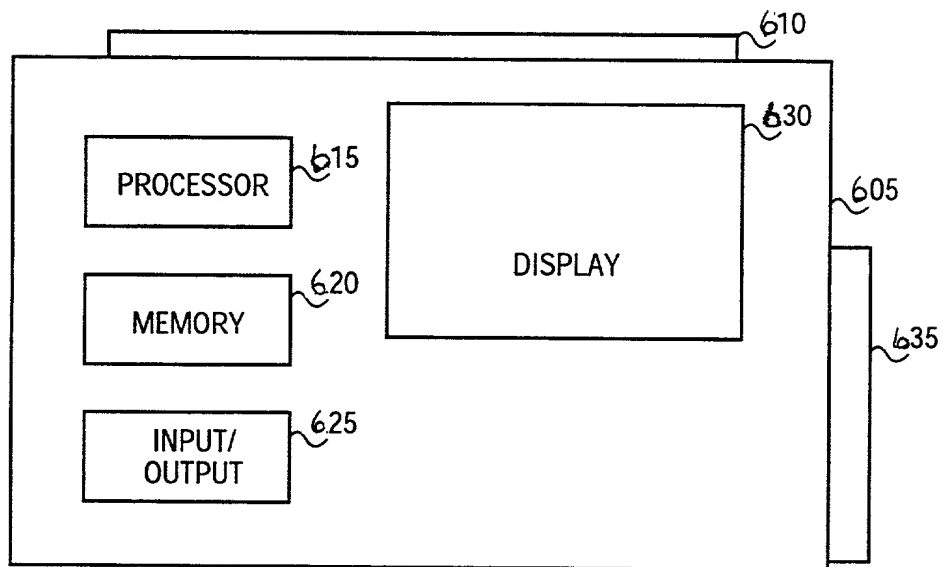


Figure 6

Figure 7

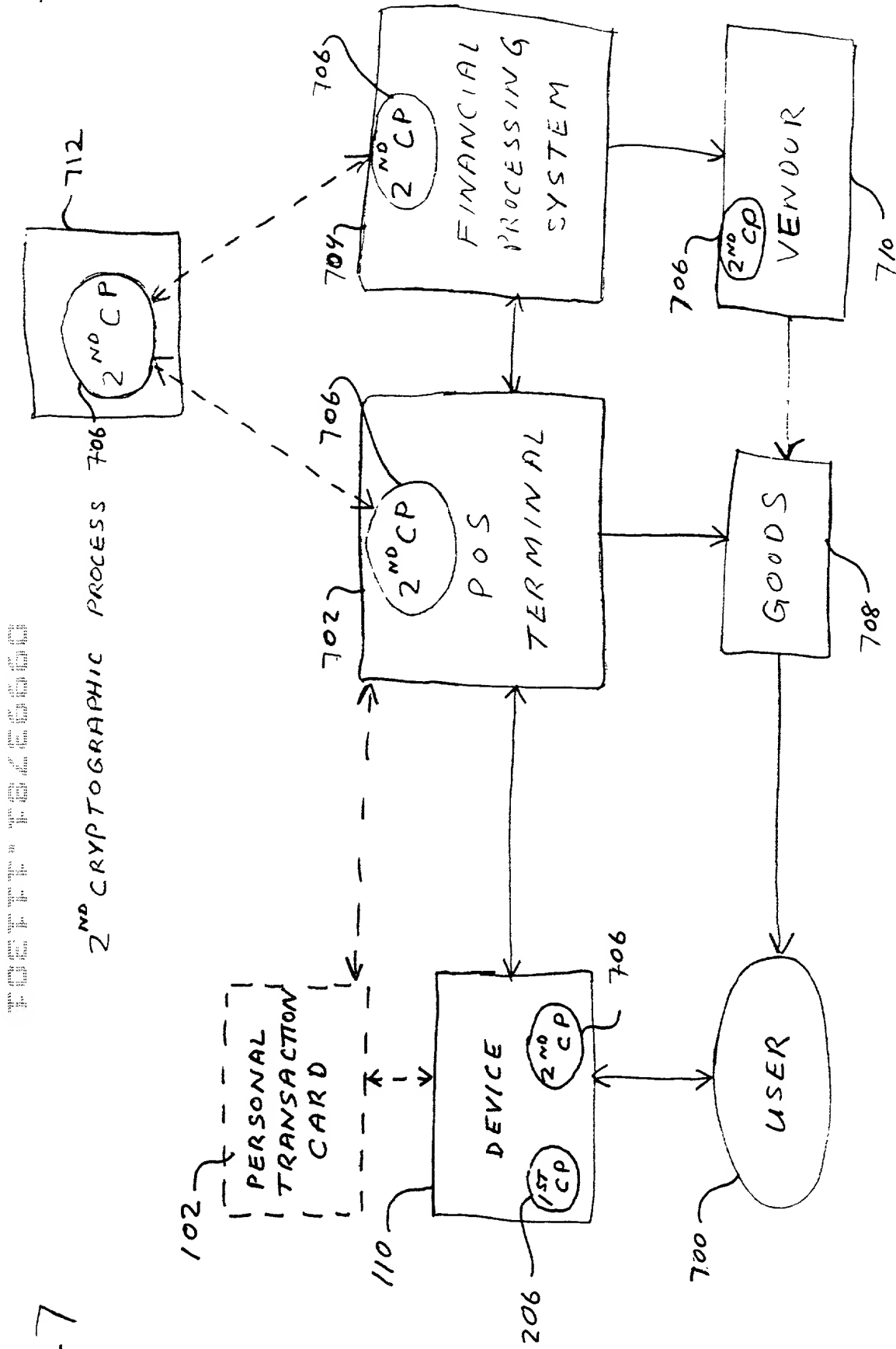


FIGURE 8

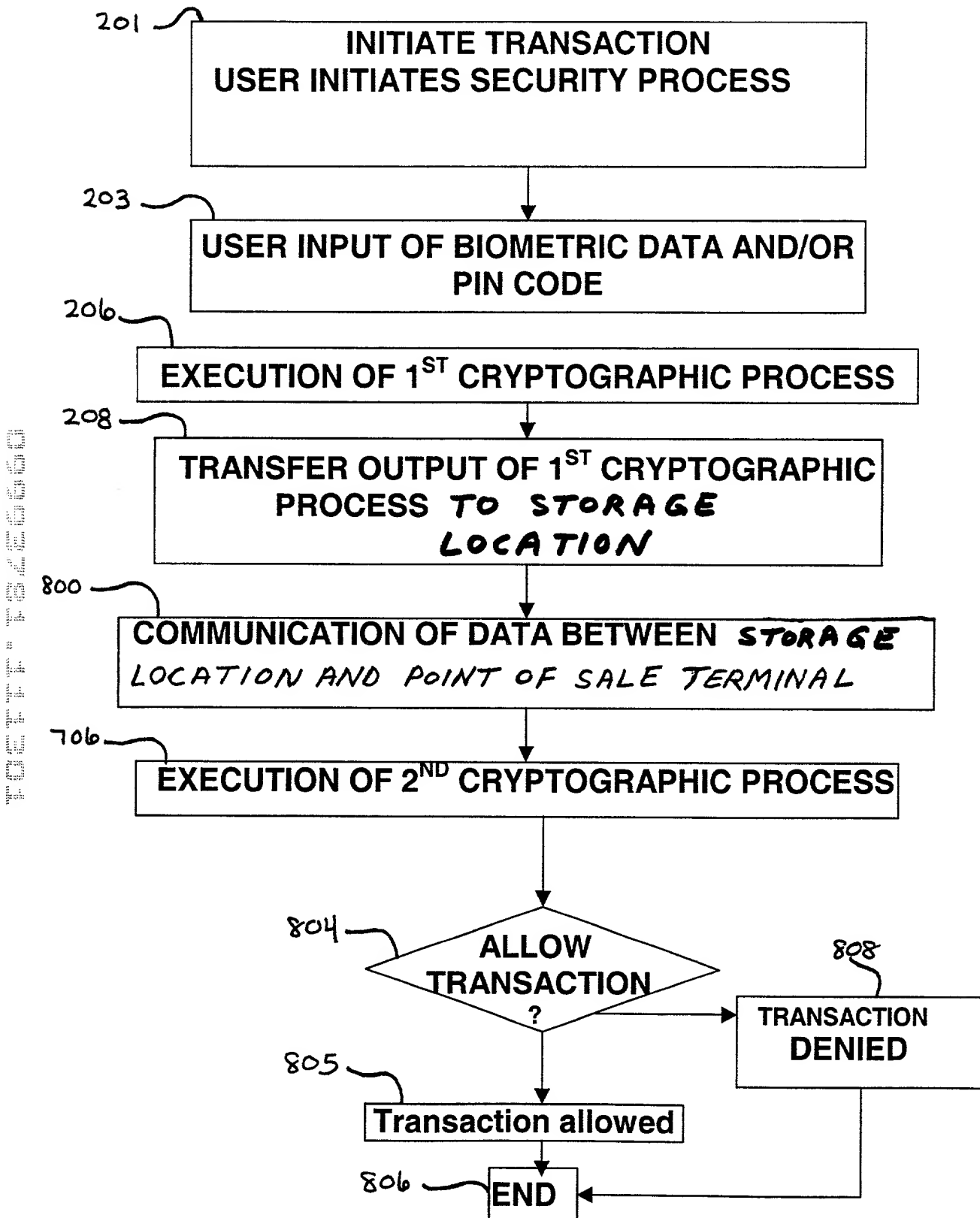
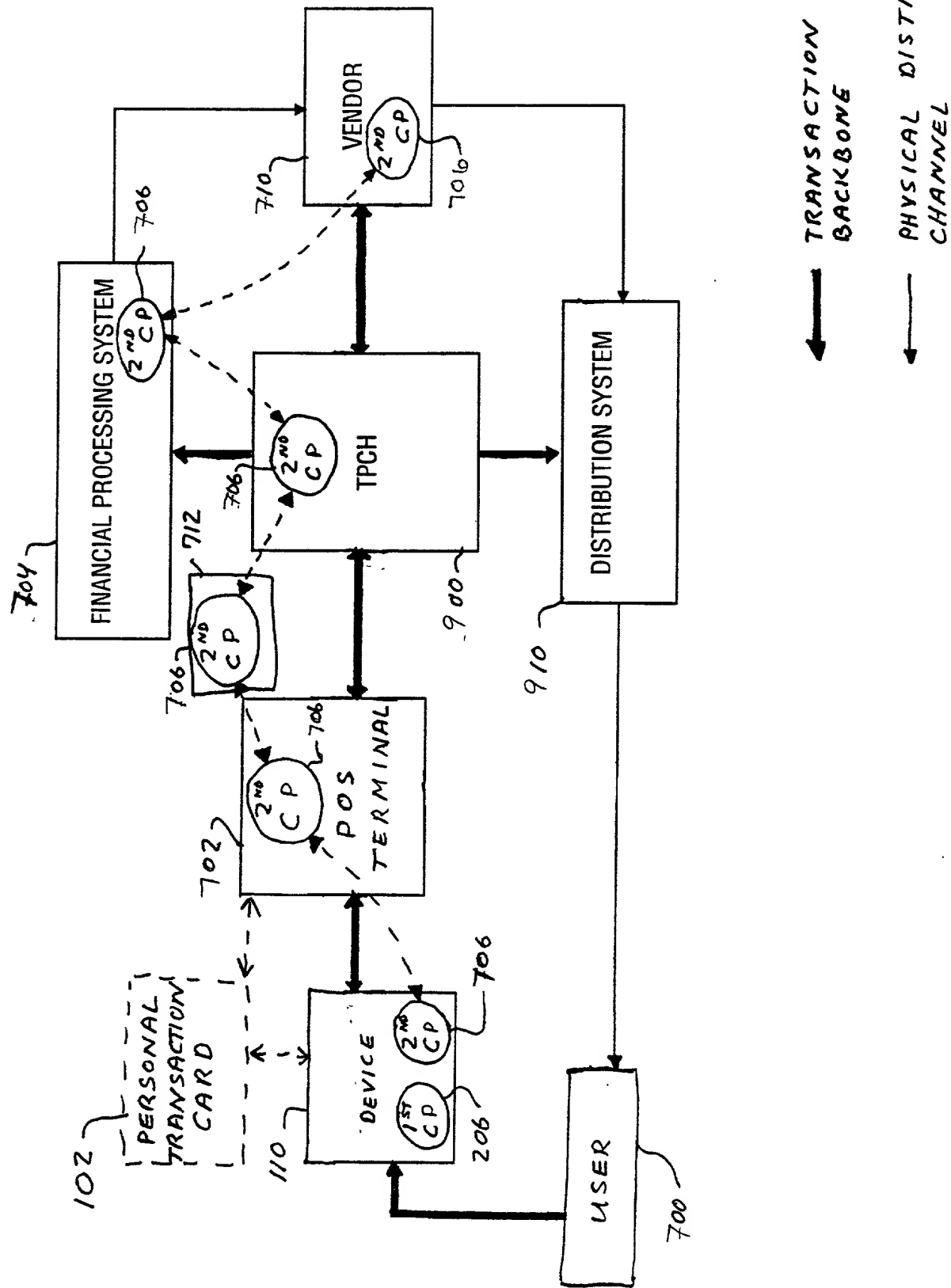


Figure 9



Commerce General Architecture

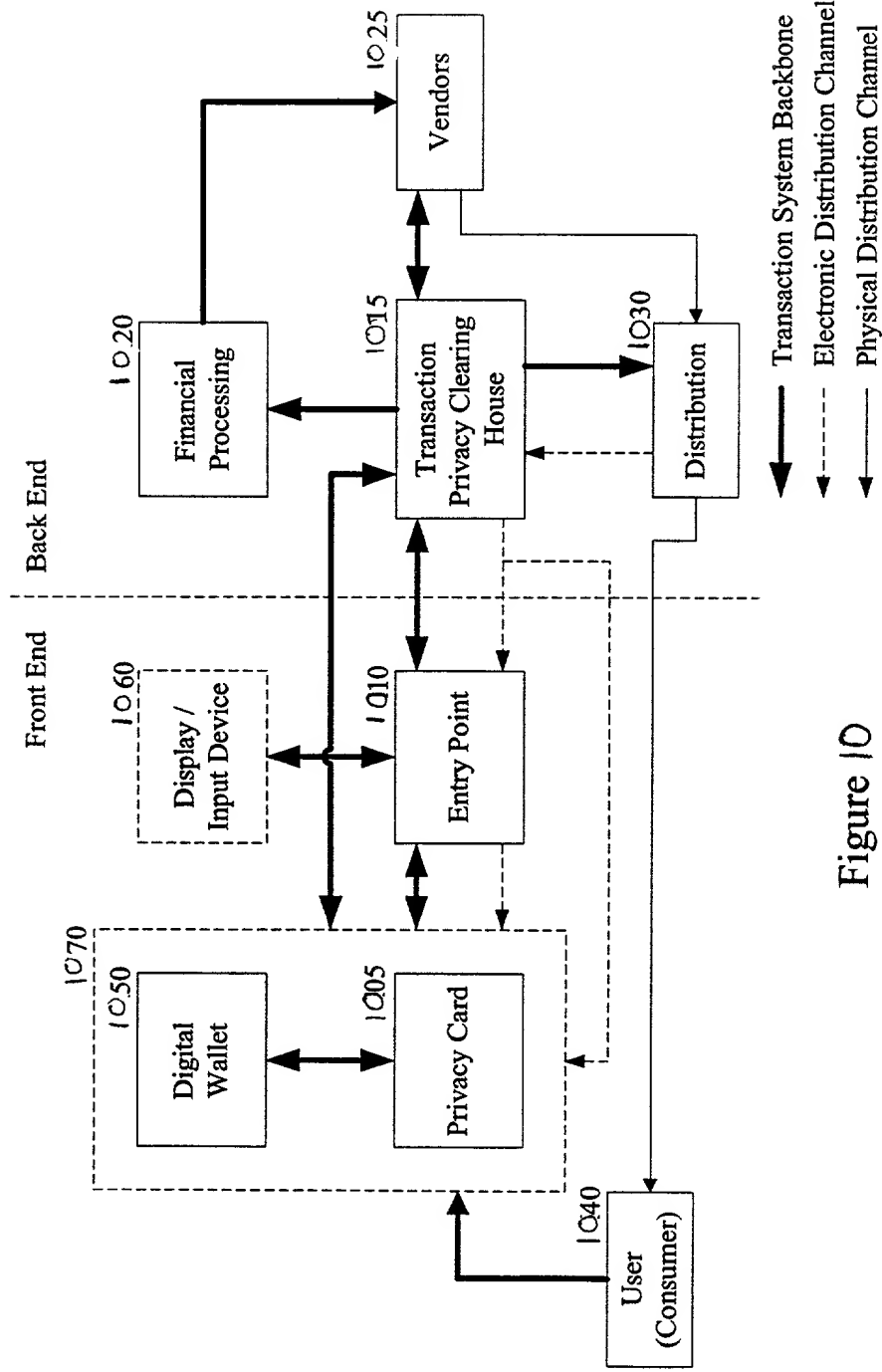


Figure 10